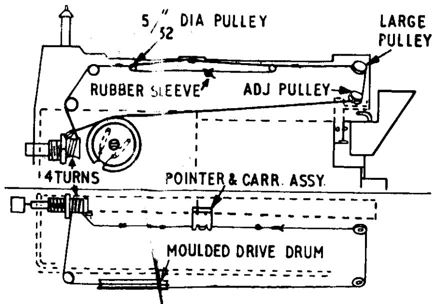
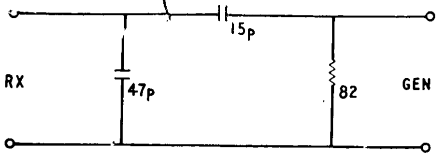
1514

E R T Service Chart

BAIRD 296





AM/FM portable covering L, M and VHF wavebands and incorporating 10 transistors and four diodes.

Battery. Ever Ready PP7, Vidor VT7 or equivalent.

Wavebands. LW 1200-2000m(250-150kc/s), MW 190-550m(1580-547kc/s), VHF 88-100mc/s.

Transistors. AF114, AF115, AF116(3), OC71, OC81(2), AC127(2).

Diodes. OA79(3), OA90.

IFs. 470kc/s and 10.7mc/s.

Aerials. Internal ferrite rod for M and L, pull-out telescopic rod for FM. Socket for car aerial.

Outlet. LS 15ohms.

Dimensions. 10⅝ × 2½ × 7⅛in.

Weight. 3lb with battery.

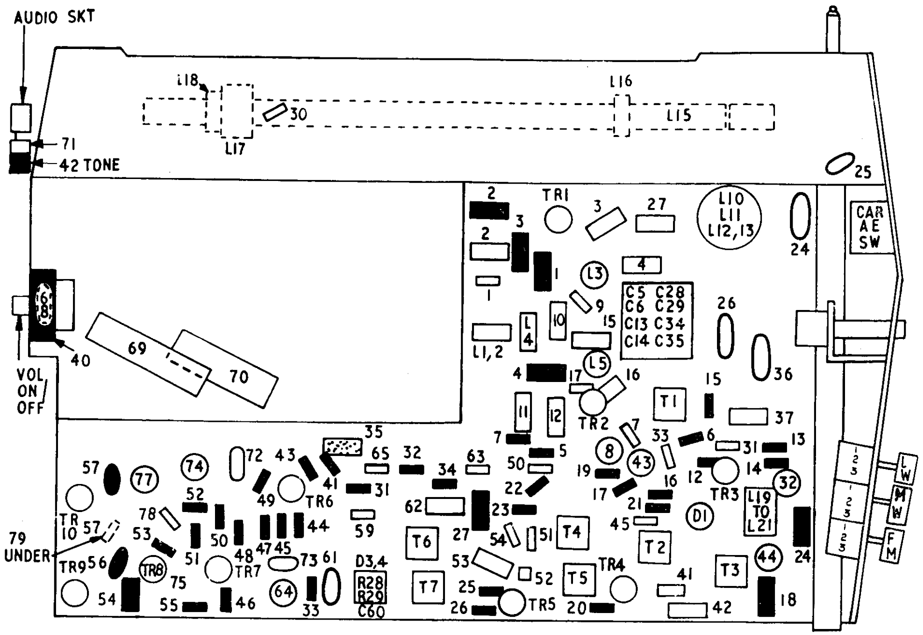
Manufacturer. Baird TV Distributors Ltd.

Service department. 414 Chiswick High Road, London W4. Tel.: Chiswick 8437.

DISMANTLING

Chassis removal. Remove cabinet back, battery and two large pull-off knobs. Loosen two screws holding tone control fixing bracket. Remove three chassis fixing screws (two under tuning knob outside cabinet, one under volume control spindle inside cabinet).

Slide tone control bracket back. Lift volume control end of chassis out of cabinet, at the same time sliding push-buttons out of their aperture.



Front view of printed circuit board showing component layout (for circuit see overleaf)

ALIGNMENT

Equipment required. AM signal generator, FM signal generator, output meter 15ohms, oscilloscope, trimming tools.

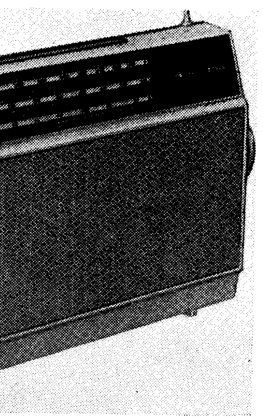
AM IF. Connect oscilloscope or output meter across speaker. Set gang to maximum capacity. Turn volume control fully clockwise. Switch to MW. Inject modulated 470kc/s signal via loop aerial or car aerial socket. Keep input signal to a minimum consistent with adequate indication for alignment. Adjust cores for maximum output in the order T6, T4 (bottom), T4 (top), T3. Cores should be set to tuning points nearest the ends of the cans. Repeat for maximum results.

RF MW. Set controls as for IF. Set four trimmers on rear of gang to mid-position. Set pointer to alignment spots at LF end of dial. Tune receiver to 500m. Inject 600kc/s modulated signal. Tune L21 until signal is received. Adjust aerial coil L15 for maximum output by moving along rod. Tune receiver to 200m. Change generator tuning to 1500kc/s. Adjust trimmer C28 for maximum output. Repeat last two adjustments for optimum results.

RF LW. Switch to LW. Tune receiver to 1800m and generator to 166.6kc/s. Adjust trimmer C37 until signal is obtained. Move aerial coil L17 on rod for maximum output. Repeat until calibration is correct.

Aerial coil MW. Connect generator via dummy aerial pad (see diagram) to car aerial socket. Switch to MW. Unscrew trimmer C27 to minimum capacity. Set generator to 600kc/s. Tune receiver to 500m. Increase generator output until signal is received.

Adjust bottom core of car aerial coil for maximum output. Tune receiver to 200m and generator to 1500kc/s. Adjust trimmer C27 for maximum output. Repeat last two operations until no further improvement results.



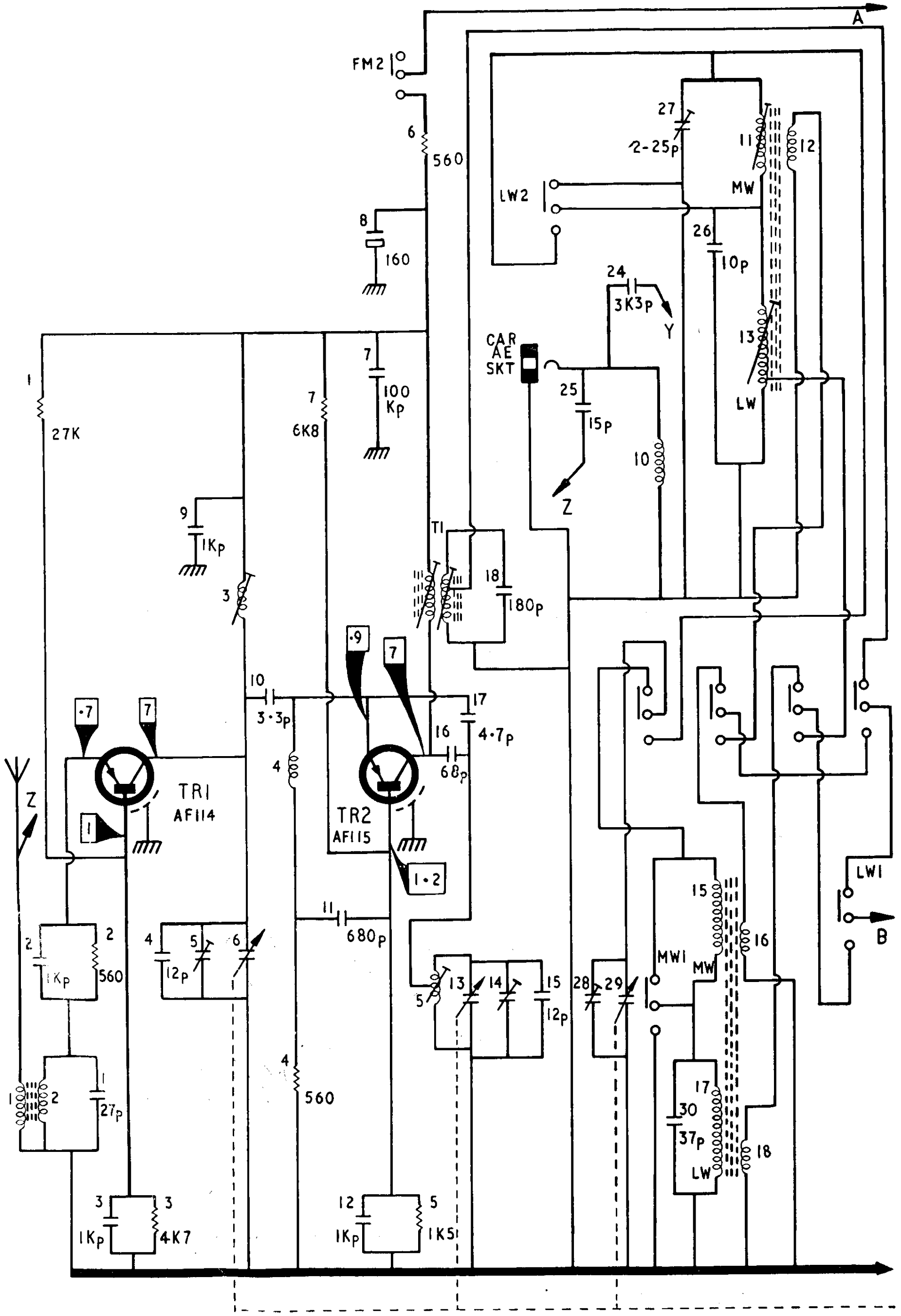
Aerial coil LW. Switch to LW. Tune receiver to 1800m. Inject 166.6kc/s signal. Adjust top core of aerial coil for maximum output.

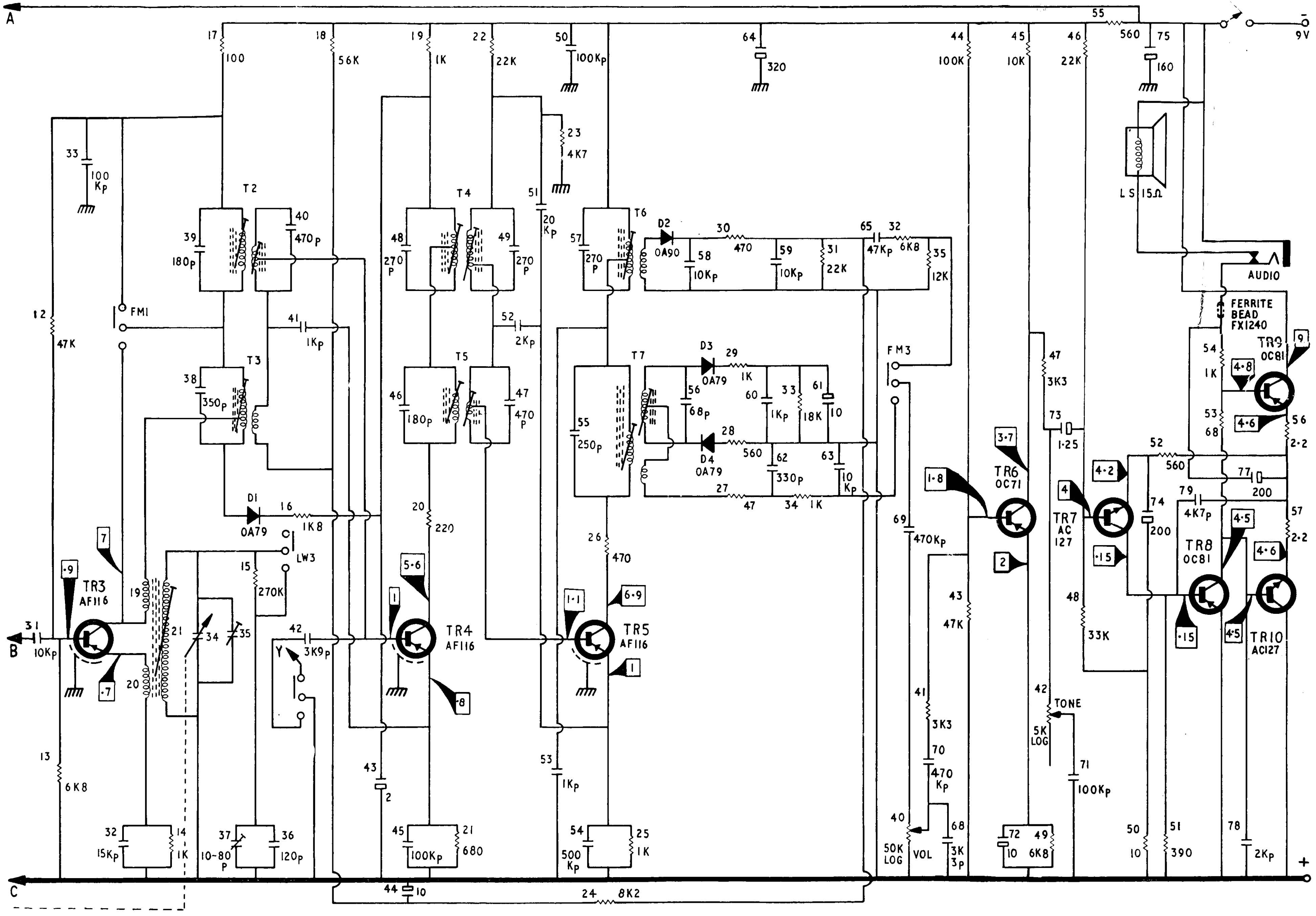
FM IF. Set top and bottom cores of T1, T2, T5 and T7 flush with end of formers. Tune receiver to 88mc/s. Switch to FM. Inject 10.7mc/s signal, deviated 15kc/s., into FM aerial coil L1, L2. Increase input until output is seen on oscilloscope.

Adjust cores in the following order, keeping input as low as possible to avoid overloading output stage, T7 (top), T7 (bottom), T5 (bottom), T5 (top), T2 (bottom), T2 (top), T1 (bottom), T1 (top). Two tuning points occur with T7 bottom core, the second maximum is the correct one. Increase deviation to 70kc/s. Readjust cores in the order given for symmetrical output.

FM RF. Set the core of L3 approximately four turns in from the top of former and the core of L5 flush with the top of former. Move trimmers C5 and C14 to the mid-position. Inject signal of 88mc/s deviated 75kc/s to aerial coil. Set receiver pointer to 88mc/s.

Adjust core of L5 until signal is heard. Adjust L3 for maximum output. Tune receiver and generator to 100mc/s. Adjust trimmer C14 until signal is obtained, then C5 for maximum output. Repeat last three adjustments until calibration is correct.


A
FM2
6
560
8
160
27
2-25p
11
12
MW
LW2
26
10p
24
3K3p
Y
CAR
AE
SKT
13
LW
25
15p
10
Z
1
27K
7
6K8
7
100
Kp
9
1Kp
3
T1
18
180p
·9
7
10
3·3p
17
4·7p
16
68p
·7
7
TR1
AF114
1
4
TR2
AF115
1·2
Z
2
1Kp
2
560
4
12p
5
6
11
680p
5
13
14
15
12p
28
29
MW1
MW
15
16
LW1
B
1
2
1
27p
4
560
17
30
37p
LW
18
3
1Kp
3
4K7
12
1Kp
5
1K5



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